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DESCRIPTION

OF THE

S O L A R,

OR,

Camera Obscura MICROSCOPE,

As Made and Sold by

J O H N C U F F,

At the Sign of the *Reflecting Microscope*, directly *with no 3*
against *Serjeant's-Inn* Gate, in *Fleet-Street*,
London.

W H E N the *Microscope* is made Use of in the
new Way, that is, by directing the Sun's
Rays, thro' a Tube, upon some Object plac'd
within and near the End of the said Tube, the Image,
or Picture of the Object is thrown in a most exact,
beautiful, and surprising Manner upon a white Paper
Screen, or Linen Sheet, placed on purpose to receive
the same: And thus all Microscopical Objects, that
are transparent, may be examined with a great deal of
Ease and Pleasure, since hereby they become exceed-
ingly magnified, beyond what they have ever been by
any other Contrivance; and with these farther Advan-
tages, that several People may view them at the same
Time; that the weakest Eyes are in no Danger of being
fatigu'd or strain'd; and that even such as have no Skill
in

in Drawing, may easily trace out the Figure of any Object, with a Pen or Pencil, as it lies before them.

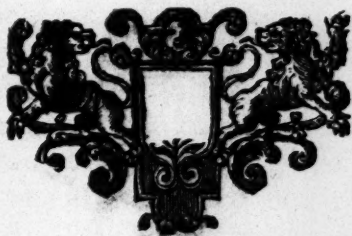
The *Apparatus* for this Purpose, consists of a Looking-Glass, a Brass Tube, a Convex Lens, and a Microscope, (which are to be apply'd to a Hole in the Shutter of a darken'd Room, in the Manner of the *Apparatus* made Use of for the *Camera Obscura*;) and a Screen of white Paper to receive the Image or Picture of any Object to be examined.

The Way of using them is as follows :

A round Hole being made in a Window-Shutter, on which the Sun shines, sufficient to receive the circular Piece of Mahogany, wherein a Brass Tube is fixed, let the Room be made as dark as possible; then putting the Looking-Glass, and End of the Tube where the Convex Lens is placed, thro' the said Hole, fasten the square Frame of Wood to the Shutter by the Screws at the Corners of it, (the Bolts are to fasten the Work in the square Frame;) just leaving Room for the Tube and Looking-Glass to be turn'd at Pleasure; and by Means of a jointed Wire that passes from the Side of the Looking-Glass through the wooden Frame into the Room, you'll be able to alter the Glass, as the Situation of the Sun may require. When the Looking-Glass is placed right, it will reflect the Sun's Rays upon the Paper Screen, and form a Spot of Light exactly round; and, as soon as you have brought it to this, screw the Tube cover'd with black to that in the Center of your wooden Frame, taking Care not to alter your Looking-Glass; then screwing the Body of your Microscope to the short Brass Tube of one Inch and a half (first taking out the Lens at the End thereof) place your Slider with the Object, as in the other Ways of using the Microscope, and slip the short Tube over the small End of the Tube that projects from the wooden Frame: The Magnifiers must be screw'd
to

to the End of the Microscope in the usual Manner ; and, generally speaking, the 4th, 5th, or 6th Glass exhibits the Object best. You'll observe a sliding Drawer in the Tube, covered with black to pull out more or less, as the Object is able to endure the Sun's Heat. The Focus of the Lens without side the Window, is at about 12 Inches, and about 11 Inches from it is commonly a proper Distance for Things that have no Life ; but the Distance must be shorten'd for living Objects, 'till they can bear the Heat well. The short Tube your Microscope is screw'd to, by sliding over the other Tube easily, will enable you to bring your Object to the true Focal Distance, and to turn it round without displacing it.

The Way of managing the several Parts of this Microscope, and the great Conveniency of it, will easily be found on Trial.



to the end of the Microscope in the usual manner,
and, generally speaking, the same, viz. for the Glass
slides the Object held. You will observe a slight
fixation in the Tube, covered with a thin
layer of oil, as the Object is placed in the
slide. The focus of the lens is somewhat
low, is somewhat better, and so on in focus,
it is commonly a proper focus, but the
have no life; but the Object and the
living Object, in the microscope, is
then, the very Microscope is a very
over the other side, and the
your Object to the end of the
a good without the
The Way of the
Microscope, and the
be found on a

